3/5/2010

Categorical Exclusion Decision Memo (DM)

Best Available Science[1] & Climate Change Language[2] Examples

To be added somewhere in the Decision

The best available science was considered in making this decision. The project record demonstrates a thorough review of relevant scientific information, consideration of responsible opposing views, and the acknowledgment of incomplete or unavailable information, scientific uncertainty, and risk.

Effects of this project on climate change, as well as the effects of climate change on this project, were also considered. Any resulting greenhouse gas emission would not be measurable on a global scale.

[1] See attached letter dated June 20, 2007 which provides additional direction for documenting best available science.

[2] See a letter of direction and additional information for Climate Change Considerations in Project Level NEPA Analysis found at http://www.fs.fed.us/emc/nepa/climate_change/index.htm.

Decision Notice (DN)/Finding of No Significant Impact (FONSI)

Best Available Science[3] & Climate Change Language[4] Examples

To be added in "Reasons for the Decision" Section

The best available science was considered in making this decision. The project record demonstrates a thorough review of relevant scientific information, consideration of responsible opposing views, and the acknowledgment of incomplete or unavailable information, scientific uncertainty, and risk.

Effects of this project on climate change, as well as the effects of climate change on this project, were also considered. Any resulting greenhouse gas emission would not be measurable on a global scale.

[3] See attached letter dated June 20, 2007 which provides additional direction for documenting best available science.

[4] See a letter of direction and additional information for Climate Change Considerations in Project Level NEPA Analysis found at http://www.fs.fed.us/emc/nepa/climate_change/index.htm.

Environmental Analysis (EA)
Best Available Science[5] Language Example

To be added to the introduction of "Chapter 3 – Environmental Effects" Section

This section summarizes the key environmental impacts of the _#__ alternatives. It provides the necessary information to determine whether or not to prepare an Environmental Impact Statement. *The analysis that follows has considered the best available science when evaluating the impacts of the proposed project on the forest resources through a review of scientific literature, a consideration of responsible opposing views, and the acknowledgement of incomplete or unavailable information, scientific uncertainty, and risk.* This includes reports submitted by Forest Service Specialists that are in the project file.

[5] See attached letter dated June 20, 2007 which provides additional direction for documenting best available science.

Environmental Analysis (EA)
Climate Change[6] Language Example

****Climate Change Analysis Must Address Effects of Project Activities.****

Climate Change Issue in "Chapter 3 - Environmental Effects" - (example for thinning & prescribed burning activities)

Climate Change

Ongoing research suggests that climate is already changing, and impacts include increases in air temperature, sea level, and frequency of extreme weather, such as hurricanes and droughts. These conditions could eventually result in more stressful forest environments, which could in turn lead to reduced growth and productivity. Declines in vigor may make forests more susceptible to large-scale pest attacks and other disturbances (Anderson 2008[7]).

The proposed thinning will help to improve the forest's resistance and resilience to climate changes (Anderson 2008). According to the Intergovernmental Panel on Climate Change, forest management can be used to mitigate climate change, by maintaining stand-level carbon density through reduction of forest degradation, planting, site preparation, and other management practices (Nabuurs et. al. 2007[8]).

The proposed burning would help to reduce fuel loadings (Ryan 2008[9]). The amount of carbon dioxide released by a low-intensity fire is small and the store of carbon on the forest floor is rapidly replaced as fine fuels re-accumulate and low shrubs regrow (Underwood et al 2008[10]).

The *direct, indirect, and cumulative effects* of this project on climate change, as well as the *direct, indirect, and cumulative effects* of climate change on this project have been considered. Any resulting greenhouse gas emission would not be measurable on a global scale.

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[6] See a letter of direction and additional information for *Climate Change Considerations in Project Level NEPA Analysis* found at http://www.fs.fed.us/emc/nepa/climate_change/index.htm

[7] Anderson, Paul. 2008. Silviculture and Climate Change. (May 20, 2008). U.S. Department of Agriculture, Forest Service, Climate Change Resource Center. Available: http://www.fs.fedus/ccrc/topics/silviculture.shtml

[8] Nabuurs, G.J., O. Masera, K. Andrasko, P. Benitez-Ponce, R. Boesr, M. Dutschke, E. Elsiddig, J. Ford-Robertson, P. Frumhoff, T. Karjalainen, O.Krankina, W.A. Kurz, M. Matsumoto, W. Oyhantcabal, N.H. Ravindranath, M.J. Sanz Sanchez, X. Zhang. 2007. Forestry. In Climate Change 2007: Mitigation. Contribution of working group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [B.Metz, O.R. Davidson, P.R. Bosch, R. Dave, L.A. Meyer (eds)], Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

[9] Ryan, Michael G. 2008. Forests and Carbon Storage. (June 4, 2008). U.S. Department of Agriculture, Forest Service, Climate Change Resource Center. Available: http://www.fs.fed.us/ccrc/topics/carbon.shtml

[10] Underwood, Roger, David Packham, and Phil Cheney. 2008. Bushfires, prescribed burning and global warming. Bushfire Fron Inc Occasional Paper No. 1. Available: http://bushfirefront.com.au/opinion/occasional-papers.

Forest Service | Washington Office | 1400 Independence Avenue, SW Washington, DC 20250

File Code: 1920/1950 **Date:** June 20, 2007
Route To:

Subject: Clarification of May 2nd, 2007, Advice on Documenting "Best Available Science"

To: Regional Planning Directors

The following information is to clarify the 1920/1950 memo signed by Acting Director Richard Cook on May 2, 2007, and is based on additional advice from OGC. Note that the language under the first bullet below has changed from the language in the May 2 memo.

A recent court ruling enjoined the Forest Service from implementing the 2005 planning rule on three counts regarding National Environmental Policy Act (NEPA), the Endangered Species Act, and the Administrative Procedure Act *(Citizens for Better Forestry v. USDA).* As a result, we are operating under the 2000 rule's transition provisions and the 2004 interpretive rule. Questions have been raised about documenting consideration of "best available science" in forest plan and project records under those rules.

The 2004 interpretive rule states "Projects implementing land management plans and plan amendments…must be developed considering the best available science in accordance with 219.36 (a) … and must be consistent with the provisions of the governing plan" (Appendix B to §219.35). In plain language, the stated rule language means that projects proposed and carried out must be consistent with the forest plan and show consideration of "best available science." The need to employ the best science is not new, as Agency decisions have always required a sound technical basis. The court decision in the planning rule case and other cases highlight the need to document how best science is used in making decisions.

With the above in mind, the Ecosystems Management Coordination (EMC) staff developed the following recommendations for documenting consideration of best available science in planning and project level environmental analyses.

- What constitutes best available science might vary over time and across scientific disciplines. As a general matter, we show consideration of the best available science when we insure the scientific integrity of the discussions and analyses in the project NEPA document. Specifically, the NEPA document should identify methods used, reference scientific sources relied on, discuss responsible opposing views, and disclose incomplete or unavailable information, See 40 CFR, 1502.9 (b), 1502.22, 1502.24.

- The project record should reference all scientific information considered: papers, reports, literature reviews, review citations, peer reviews, science consistency reviews, results of ground-based observations, and so on. The specialists report in the record should include

a discussion substantiating that consideration of the aforementioned material was a consideration of the best available science.

- The responsible official should include a statement in the record of decision, decision notice, or decision memo showing consideration of the best available science as the basis for the decision. For example: "My conclusion is based on a review of the record that shows a thorough review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgment of incomplete or unavailable information, scientific uncertainty, and risk" and then briefly mention specific things from the record.

Please share this memo with all forest supervisors and district rangers and consider the above advice when conducting environmental analyses in your region. Direct questions to Ron Pugh, Planning Specialist (202) 205-0992, or JoEllen Keil, NEPA Specialist at (202) 205-0939.

/s/ Richard J. Cook (for)
DAVID S. DILLARD
Director, Ecosystem Management Coordination